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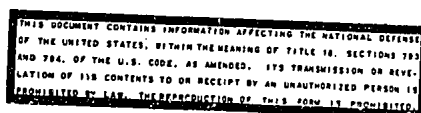
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On 9 February, members of the chemical industry, including industrial chemists, Stakhanovites, and leading chemical innovators, attended the second Gazda movement meeting of the chemical industry.

The meeting was called to order by Alajos Tihanyi, Deputy Minister of Mining and Power. He pointed out that the results obtained by the Gazda movement, namely utilization of wastes and by-products, furnish the best proof of the enthusiastic endeavors of the workers of the chemical industry.

Lorand Borsodi, section chief of the National Planning Office, discussed the additional tasks facing the Gazda movement in the chemical industry, as well as practical methods for achieving the goals set. There are still many waste materials which must be systematically classified; no specifications have yet been issued for their processing. Borsodi mentioned several possibilities in connection with the execution of planned tasks. For instance, the Hungaria Vegyimuvek (Hungaria Chemical Works) has failed to utilize its waste material. With the help of the Gazda movement, however, it can make use of discarded electrodes, hydrogen, and muriatic acid. Other projects may be developed for the utilization of paper pulp, the lyes of the fermentation industry, etc. It is the duty of the Chemical Association to see that the appropriate Soviet literature be made available for solving these tasks; the unsurpassed technology of the Soviets provides a guide for the solution of these problems.

Good work has been done by the Magyar-Szovjet Olajfeldolgozo Vallalat (Hungarian-Soviet Oil-Processing Enterprise), where oil sludge, unexploited so far, has been processed into motor fuel worth almost 300,000 forints. The Peti Asvanyolaj Ipari Vallalat (Pet Mineral Oil Industry Enterprise) has likewise recovered valuable products from oil sludge. The lyes formerly discharged into sewage canals have also been utilized for water-softening purposes by the same concern.

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It was mentioned at the first meeting of the chemical industry that because of improper technical processes, a large portion of valuable fluorine was wasted in the manufacture of superphosphates at Peremarton. This error has been corrected and cryolite production shows a considerable increase for this year.

The pharmaceutical industry has used the method of the Gazda movement to good advantage in its effort to produce materials formerly imported. The Chinoin Gyogyszer es Vegyeszeti Termekek Gyara (Chinoin Pharmaceutical and Chemical Products Factory), cooperating with the Gyogyszeripari Kutatointezet (Research Institute of the Pharmaceutical Industry), has evolved a new process for the production of ultraseptyl, making it possible to produce this drug from domestically available materials, in part waste materials, instead of expensive imported substances. The pharmaceutical industry is also producing ergosterin from mycelium, a substance obtained as a by-product in the manufacture of penicillin.

The workers of the Novenyolaj es Szappangyar (Vegetable Oil and Soap Factory) have also joined the Gazda movement and have devised methods of using substitutes for materials heretofore imported from western countries. For instance, the perfecting of Tutogen, a foam extinguisher, has resulted in the saving of a half million forints in foreign exchange.

Despite these results, however, many errors may be pointed out. It has often occurred that important improvements, excellent new technical processes, could not be put into operation because they were not backed by higher authorities. The compression of oxygen, for instance, could not be realized for lack of financial appropriations. The same applies to phenol extraction, the domestic production of which would result in considerable savings.

The study of Soviet technical literature is responsible for the excellent results achieved by the Gazda movement in the chemical industry. As a result, for example, the sediment remaining from the manufacture of sulfuric acid is now utilized through the extraction of selenium and lead salts. The Ipari Robbarkozas-yaggyar Vallalat (Industrial Explosives Manufacturing Enterprise) extracts the selenium content from this sediment and uses the metallic selenium in manufacturing photocells. In the same way, lead sediment of high lead sulfate content, also a by-product of the manufacture of sulfuric acid, is being converted into lead salts. By processing and selling waste materials and by-products, the plant is saving 1,343,000 forints per annum.

Soviet technical literature and Soviet experts visiting Hungary have called attention to the fact that in some plants the waste materials used as raw materials have been incorrectly employed. Two Soviet experts assisted the Magyar Ruggy-antaarugyar (Hungarian Rubber Products Factory) for several months in the utilization of waste and reclaimed rubber. High-quality finished products could not be manufactured from such reclaimed products in Hungary before the Soviet experts had taught the workers how to make good use of reclaimed products. As a result of this instruction, the workers have undertaken the processing of five carloads of previously unused crude-rubber mixtures, the value of which exceeds 750,000 forints.

Cooperation between individual plants is an important factor in improving results obtained by the Gazda movement. Such cooperation brought excellent results in many fields, but because it is still not fully organized there is much unnecessary waste and difficulties are also experienced in storing. To cite a few examples of successful cooperation: The Szolnok Papirgyar (Szolnok Paper Factory) utilizes 1,600,000 liters of muriatic acid mixtures from the Chinoin in place of alum. The Diosgyori Papirgyar (Diosgyor Paper Factory) undertook the processing of flax and hemp-carding waste. The Eternit Muevek (Eternit Works) uses the worn-out bronze sieves which the Fuzfoi Papirgyar (Fuzfo Paper Factory) was ready to discard. The wood-impregnating industry processes salts already used by the slaughterhouse, while the porcelain insulator manufacturing industry utilizes the mass waste products of the Peci Gazmuevek (Pecs Gasworks) instead of lead used heretofore.

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However, many possibilities are still unexploited. Thus, industrially contaminated waste acids, including about 100 tons of sulfuric acid, were stored by the Novenyolajes Szappangyar; their storage or transportation posed equally grave problems. The factory offered this waste material to the Rakosi Matyas Muvek (Matyas Rakasi Works), where it could be usefully employed for the treatment of iron. Unfortunately, negotiations are deadlocked because of transportation difficulties, and the waste acid is now being emptied into the Danube. The Hungaria Vegyimuvek is faced with the problem of recovering the hydrogen now escaping into the air, while at the same time the Albertfalvai Vegyigyar (Albertfalva Chemical Factory) is unable to obtain hydrogen for the hydrogenation of oils.

However, large amounts of waste materials hitherto unused and stored have been put to good use. The Ruggyantaarugyar will soon be working with waste materials now lying in the yards of the Hungaria Vegyimuvek.

The meeting also gave ample opportunity for an exchange of information. One of the principal by-products of the Novenyolajgyar (Vegetable Oil Factory) is oil sludge, which exerts a detrimental effect on the oil layer above it; fermentation sets in and free sulfuric acid is produced. It would be of great importance if all oil-producing plants would collect this oil sludge, since a very valuable substance, lecithin, could be produced from it. It is most regrettable that of all the oil-producing plants only the Rakospalotai Novenyolajgyar (Rakospalota Vegetable Oil Factory) has so far made use of oil sludge for producing lecithin.

One of the basic requirements for the processing of waste materials and by-products is close cooperation between plants and research institutes. The research institutes approached the problems of material conservation with great enthusiasm and assisted the plants in solving many problems. The Szerves Vegyipari Kutato Intezet (Research Institute of the Organic Chemical Industry) maintains constant contact with the plants through a special official appointed for this task. He has to report every other week on problems arising in the plants.

Ten processes have been worked out so far within the Gazda movement. One of these, the utilization of waste materials from the manufacture of indanthrene dyes, has resulted in the saving of 800,000 forints. The mother lye liquor obtained in the alkaline condensation of formaldehyde, generally considered a valueless by-product, is now converted into oxalic acid. Another excellent example of cooperation was furnished by the Nehezvegyipari Kutato Intezet (Research Institute of the Heavy Chemical Industry), which organized the Gazda movement within the research institute. In addition, it established communication with the Gazda movements of eight enterprises, including the Rakosi Matyas Muvek, MAVAG (Magyar Allami Vas Acel es Gepgyar, Hungarian State Iron, Steel, and Machine Works), the Diosgyori Vasgyar (Diosgyori Ironworks), and several enterprises of the chemical industry.

At the meeting many suggestions were submitted aiming at the elimination of errors still existing in the Gazda movement. It is very important, in the opinion of the Research Institute of the Heavy Chemical Industry, that every shop engineer who introduces a new material or process in connection with the material conservation program should be given a suitable bonus, even if the process was invented by someone else. The Egyesult Gyogyszer es Tapszergyar (United Pharmaceutical and Food Factory), cooperating with the Albertfalvai Vegyigyar, requested appropriation of funds to cover the costs of experimentation. Jozsef Gulyas, the engineer in charge of operations, suggested that the Gazda movement should be made part of the operating plans.

Imre Garai, assistant manager of the National Patent Office, called on those participating in the conference to turn to the Patent Office when they meet difficulties. He added, however, that technical managers, innovators, and

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Stakhanovites should make a systematic search for the most suitable manner of processing waste materials. They should prepare precise plans for utilizing waste and inaugurating new methods.

Garai also reported that the National Patent Office, cooperating with the Chemical Association, is sponsoring a contest, in which the chemical industry is to participate, for the best ideas or processes on material conservation, utilization of waste, and ways of reducing imports. A 50,000-forint fund is being established for awards.

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